

Dorsal I 6; $1\frac{1}{3}$ times as distant from base of caudal as from end of snout; spine $\frac{2}{3}$ length of head; first three soft rays subequal, as long as head, reaching adipose fin when laid back. Base of adipose fin nearly twice in its distance from rayed dorsal. Anal 11; 8 rays branched. Pectoral spine $\frac{2}{3}$ length of head, strongly serrated on inner border. Caudal deeply forked, with pointed lobes. Caudal peduncle about $1\frac{1}{2}$ as long as deep. Brownish above, lighter below; base of rayed dorsal and adipose fin dusky; anal with a dark patch; a blackish patch behind gill-cover.

A single specimen, 105 mm. in total length, from Bandama River.

Closely allied to *G. tilhoi*, Pellegrin, differing chiefly in the form of the dorsal fin.

LXII.—*The Geographical Races of Lutreolina crassicaudata.*
By OLDFIELD THOMAS.

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THE distribution of the South American mink-like Opossum, *Lutreolina crassicaudata*, is a very peculiar one, as the animal occurs in British Guiana, and then only reappears in Paraguay and Argentina, being completely absent throughout Amazonia and Brazil.

Whether the British Guiana form, for which the name *turneri* is available, should be treated as a separate species from the southern ones, is rather doubtful, but after some consideration I am inclined to keep to the opinion expressed in the Catalogue of Marsupials that all the forms of the group may be considered as one species. For the range in size of the southern forms just includes that of *turneri*, so that there is no gap in the measurements, at least of the males, even if there is the great gap in geography. And, again, the southern forms, though presenting well-marked geographical races, all do, or seem likely to, intergrade, as there are there no geographical gaps to make unbridged gaps in the characters.

The forms I should recognize may be distinguished as follows:—

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|---|---------------------------|
| A. Sexes materially different in size, skull-length | |
| of ♀ about 85 per cent. of that of ♂. | |
| a. Skull-length of ♂ about 60 mm.; of ♀ 52. | 1. <i>L. c. turneri</i> . |
| British Guiana | [<i>caudata</i> . |
| b. Skull-length of ♂ about 70 mm.; of ♀ 59. | 2. <i>L. c. crassi-</i> |
| Paraguay | |

B. Sexes approximately equal in size.

c. Size larger, both males and females with skull 68-75 mm. in length.

a². General colour more brownish. Lower Parana from Santa Fé to Montevideo. 3. *L. c. paranalis*.

b². General colour paler and more yellowish. Province of Buenos Ayres 4. *L. c. bonaria*.

d. Size smaller; ♂ skull 60 mm., ♀ 58. South Uruguay and Rio Grande do Sul. 5. *L. c. lutrilla*.

1. *Lutreolina crassicaudata turneri*, Günth.

Size comparatively small: skull-lengths, ♂ 60 mm.; ♀ 52, the latter the smallest adult skull in the collection. General colour dark brown.

Only recorded locality, Better Hope, Demerara (Rev. W. Y. Turner).

Type. B.M. no. 79. 5. 1. 3.

2. *L. c. crassicaudata*, Desm.

Size larger: skull-lengths, ♂ 70, 65 mm.; ♀ 59, 57, 55. Colour greyish olivaceous.

Hab. Paraguay. Museum specimens from the Chaco west of Asuncion (*Insley, Marquis de Wavrin*).

3. *L. c. paranalis*, subsp. n.

Size large, the skulls of males of about the same length as in *crassicaudata*, and the females equalling the males, so as markedly to exceed those of the Paraguayan forms; skull-lengths, ♂ 69, and others, broken, of about the same size; ♀ 70, 69, 67, 68, 61, 68; two of unknown sex 74, 72. General colour comparatively dark brown, that of the type approximating to "buffy brown." Under surface also dark, and the peculiar purplish tinge found in the living animal more persistent in the skins than it is in other forms.

Dimensions of type (measured in the flesh) :—

Head and body 311 mm.; tail 282; hind foot 46; ear 26.

Skull: greatest length 69; combined length of ms^{1-3} 11.

Hab. Province of Santa Fé, extending apparently to the delta of the Parana and eastward to Montevideo. Type from Las Rosas, Santa Fé. Others from Noetinger, in the same province.

The range of this subspecies, both to north and south, is as yet rather doubtful, for though the Museum possesses specimens of the group from Corrientes and Goya to the north, and Isla Ella, Parana Delta, and Colon, Montevideo, which I provisionally refer to it, yet these are all more or less immature, and so not diagnostic. But *Lutreolina* does

occur all the way down the river, so that there is no gap which might indicate a specific separation between *crassicaudata* and *paranalis*.

Type. Adult female. B.M. no. 17. 5. 2. 22. Original number 2770. Collected 6th November, 1916, by Robin Kemp. Presented by Oldfield Thomas. Twelve specimens.

4. *L. c. bonaria*, subsp. n.

Size averaging even slightly larger than in *paranalis*, and similarly equal in the two sexes. General colour paler, more yellowish buffy. Under surface also paler.

Dimensions of the type (measured in the flesh) :—

Head and body 350 mm.; tail 305; hind foot 47; ear 28.

Skull: greatest length 67; combined length of *ms*¹⁻³ 10.9.

Other skulls measure: ♂ 75, ♀ 76, 64.

Hab. Buenos Ayres Province, from the neighbourhood of Buenos Ayres (Belgrano) to Cape San Antonio; type from Los Yngleses, Ajó.

Type. Adult female. B.M. no. 20. 2. 7. 44. Original number 21. Collected 20th July, 1919, by H. E. Box, and presented by Oldfield Thomas. Eight specimens.

The greater pallor of these southern *Lutreolines* is very evident on the comparison of a series of them with those of Santa Fé, representative of *L. c. paranalis*, though individually the difference is not very striking.

5. *L. c. lutrilla*, subsp. n.

Size decidedly less than in any other of the southern forms, the male just equalling, and the female barely exceeding, the corresponding sexes of the little British Guiana subspecies. Colour at present indeterminable, as Darwin's specimen is apparently bleached, and the Rio Grande do Sul one is in spirit, but the general tone is probably about as in *paranalis*.

Dimensions of the type (measured on a skin preserved in spirit) :—

Tail 230 mm.; hind foot 32; ear 20.

Skull: greatest length 58; combined length of *ms*¹⁻³ 9.4.

Greatest length of male skull 60.

Hab. Rio Grande do Sul and S.E. Uruguay. Type from San Lorenzo, R. Grande do Sul.

Type. Adult female, skin in alcohol. B.M. no. 85. 6. 26. 26. Collected by Dr. H. von Ihering.

Darwin's specimen from Maldonado, figured in the "Voyage of the 'Beagle,'" would appear to be the same form, which is distinguished by its very small size.